REMARKS

Claims 1-10 were rejected under 35 USC § 102(e) as anticipated by Werner (U.S. Patent No. 6,046,067). Claim 12 was rejected under 35 USC § 103(a) as unpatentable over Werner in view of Fahey et al. (U.S. Patent No. 5,447,884).

Claims 1-12 have been amended to patentably distinguish over the cited references. Specifically, the amended claims call for etching a first trench in a device layer of a substrate wherein the first trench surrounds a first region of the substrate. A dielectric isolation layer is deposited in the first trench to electrically isolate the first region of the substrate from a second region of the substrate. A second trench is etched in the device layer wherein the second trench is located in the first region and defines a microstructure. Werner does not disclose this method.

Werner discloses a method for fabricating a micromechanical device. In this method, a plurality of trenches are etched into a monocrystalline silicon layer 3. The trenches are filled with a doping insulating material to form a doping insulating layer 4. The doping insulating layer 4 is subsequently removed from the trenches to form movable electrodes BE1, BE2 and fixed electrodes FE1 to FE3. These electrodes define the microstructure which is an acceleration sensor. A planar covering D is next formed over the entire top surface of the device to provide a circuit connection between the sensor of region SB and a transistor arrangement of region TB.

As can be seen from the above description, Werner does not disclose etching a first trench in the device layer and depositing a dielectric isolation layer in that trench to electrically isolate the first region of the substrate where a microstructure is located from a second region of a substrate where circuitry may be formed. Rather, Werner simply discloses etching trenches in a substrate to form a microstructure wherein the microstructure, in region SB, is electrically connected to a transistor arrangement, in region TB, by means of a circuit cover D.

Please also note that the title of the application has also been amended to be consistent with the claims.

Attached is a marked-up version of the changes being made by the current amendment. The attached page is captioned: "Version with markings to show changes made."

In view of the foregoing, it is submitted that all the claims are in condition for allowance. Accordingly, allowance of the claims at the earliest possible date is requested.

If prosecution of this application can be assisted by telephone, the Examiner is requested to call applicant's undersigned attorney at (925) 906-1302.

Enclosed is a check in the amount of $460.00 for the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 12/5/01

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Version with markings to show changes made

In the title:

The title has been amended as follows:

METHOD OF FABRICATING A MICROFABRICATED HIGH ASPECT RATIO DEVICE WITH ELECTRICAL ISOLATION [AND INTERCONNECTIONS]

In the claims:

Claims 1 and 2 have been amended as follows:

-- 1. (Amended) A method of fabricating a microelectromechanical system, comprising:

providing a substrate having a device layer;

etching a first trench in the device layer, the first trench surrounding a first region of the substrate;

depositing a dielectric isolation layer in the first trench to electrically isolate the first region from a second region of the substrate; and

etching a second trench in the device layer, the second trench located in first region and defining a microstructure. --

-- 2. (Amended) The method of claim 1 further comprising forming circuitry in [a] the second region of the substrate outside the first region. --